

**Morphogenesis of Skin**, Philippe Sengel. Cambridge University Press, New York, 1975. (275 pp; \$37.00)

Philippe Sengel, Professor of Zoology at the Université Scientifique et Médicale de Grenoble in France, although well known to experimental embryologists, is perhaps less familiar to dermatologists for his work in skin biology. In the past several years he has published many studies, mostly in the French literature, on avian skin morphogenesis. In his present book (written in easily readable English), the author has provided an extremely detailed and informative review of the development of skin with particular emphasis on the current state of our knowledge of control mechanisms. As such, he has made a very useful contribution. The book begins with a review of the essentials of development of amniote (reptiles, birds, and mammals) skin, and both the early and late formative stages of epidermis and some of its appendages, namely scales, feather, and hair, are reviewed. Sengel then analyzes morphogenesis by first reviewing the available information on the role of cell proliferation in organ formation. This includes a discussion of the controls of cell proliferation which is somewhat limited in scope, reflecting the author's present interests. The next topic concerns regulation of differentiation, with particular emphasis on keratinization. The book concludes with an in-depth analysis of various factors that include formation of stratified squamous epithelia and the various cutaneous appendages from primitive ectoderm. There is an excellent discussion of integrated morphogenesis or pattern formation as regards the location of appendages with respect to one another.

The literature on experimental aspects of skin development is quite extensive, but much of the data has been somewhat confusing. The author has done a fine job of pulling together the vast amount of available material to make a comprehensible story. Most analytical work in skin biology has been carried out in chick embryos, with lesser amounts of information being available for mammals (in particular the mouse) and reptiles. However, despite limited data, there seem to be certain developmental phenomena common to all the different classes of vertebrates studied and these are convincingly pointed out.

In terms of mechanisms of development, most emphasis in the book pertains to epidermal-mesenchymal interactions. Skin has been used extensively in the analysis and demonstration of these very important interactions. The author describes the effect of dermis on epidermis and vice versa at various stages of skin development and

shows how these interactions play a role in the regulation of proliferation, differentiation, and organ formation. The examples are well illustrated with exceptionally clear photographs and diagrams. While there may be some minor arguments regarding the interpretation of some developmental phenomena, these relate to situations for which there is as yet no definitive answer. Because the material is so well organized and because the author has an exceedingly good grasp of developmental phenomena which he has been able to express in his writings, this book should be invaluable to the developmental biologist. In addition, since Dermatology has become an experimental as well as clinical specialty, dermatologists should become familiar with mechanistic as well as descriptive approaches to skin development. This book should be compulsory reading for anyone who has more than just a superficial interest in the biology of skin.

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**Acne Morphogenesis and Treatment**, Gerd Plewig, M.D., and Albert M. Kligman, M.D., Ph.D. Springer-Verlag, New York, 1975. (333 pp; \$50.40)

This magnificent volume is almost a pictorial essay of acne in its myriad forms of expression. Designed for the practitioner who treats acne, the book provides the reader with 110 plates, mostly in color, of photographs, photomicrographs, and illustrations. All of these are good, many are truly outstanding. The type is large and of excellent quality. Nowhere, in this reviewer's experience, has a collection of photographs of such consistently high quality been put together in one volume.

The text is complementary, with selected, but appropriate, references. The authors plainly state in the Preface that the text is written in a personal, didactic manner. This is true. By its very nature, therefore, parts of the written material are oversimplified and/or speculative. A more serious defect, however, is that the references are not keyed to the text. Thus, unless one is thoroughly versed in the literature, one cannot differentiate those statements in the text which are the author's opinion from those that are supported by experimental evidence. This, however, does little to detract from the value of the book and the reader is provided with adequate reference material if he desires to delve further into the literature of this pleomorphic disease.

Above all, the authors "... have sought to create a portfolio of still-life pictures of the gross